



11-ME-472  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Richard A. Balch, et al. :  
Serial No.: 09/606,769 : Art Unit: 2857  
Filed: June 29, 2000 : Examiner: Morris, Andrew P.  
For: METHODS AND APPARATUS FOR METERING :  
ENERGY CONSUMPTION :

**SUBMISSION OF MARKED UP CLAIMS**

Commissioner for Patents  
Box FEE AMENDMENT  
Washington, D.C. 20231

Sir:

Submitted herewith are marked up Claims in accordance with 37 C.F.R. Section 1.121(c)(1)(ii).

IN THE CLAIMS

Please cancel Claims 2 and 32.

1. (once amended) A method for metering energy consumption with an electric meter, said method comprising the steps of:

generating metering quantities for a plurality of phase voltages from a multiphase voltage source, including generating revenue-related data;

monitoring voltage changes on at least one of the phase voltages;[ and]

performing a predetermined task in response to a voltage change on at least one of the phase voltages while continuing to generate revenue-related data; and

changing a metering form type of the meter in accordance with a remaining set of phase voltages when at least one of the phase voltages is lost; and

generating metering quantities from the remaining set of phase voltages using the changed metering form type.

3. (once amended) A method in accordance with Claim [2] 1 wherein the meter is controlled by a microcomputer operable to perform metering in accordance with multiple form types, and said method further comprises the step of assigning a case number to each form type.

5. (once amended) A method in accordance with Claim [2] 1 and further comprising the steps of checking voltages at programmed intervals and changing metering form a second time in accordance with the checked voltage.

6. (once amended) A method in accordance with Claim [2] 1 wherein the meter is in a wye configuration initially and wherein changing metering form type in accordance with a remaining set of phase voltages comprises changing the form to a 2 1/2 element meter.

7. (once amended) A method in accordance with Claim [2] 1 wherein monitoring voltage changes on at least one of the phase voltages comprises periodically checking whether voltage is lost.

9. (once amended) A method in accordance with Claim [2] 1 wherein monitoring voltage changes on at least one of the phase voltages comprises determining that a voltage is lost when the voltage drops to one-half of a normal voltage.

15. (once amended) A method in accordance with Claim 14 wherein the voltage change is one of a voltage sag below a predetermined level [and] or a voltage swell above a predetermined level.

24. (once amended) A method for metering energy consumption with an electric meter, said method comprising the steps of:

generating metering quantities for a first voltage source;

receiving input data from other meters associated with a load; and

processing the input data to produce a value representative of a total energy consumed.

27. (once amended) A method for metering energy consumption with an electric meter, said method comprising the steps of:

operating the meter in a first mode of operation;

periodically checking, at temporal period boundaries, for pending changes to the mode of operation; and

effecting the change to the mode of operation after a periodic check.

31. (once amended) An electric meter for metering energy consumption, said meter configured to:

generate metering quantities for a plurality of phase voltages from a multiphase voltage source, the metering quantities including revenue-related data;

monitor voltage changes on at least one of the phase voltages;[ and]

perform a predetermined task in response to a voltage change on at least one of the phase voltages while continuing to generate revenue-related data;

change a metering form type of the meter in accordance with a remaining set of phase voltages when at least one of the phase voltages is lost; and

generate metering quantities from the remaining set of phase voltages using the changed metering form type.

33. (once amended) An electric meter in accordance with Claim [32] 31 wherein said meter comprises a microcomputer, and said meter is configured to perform metering in accordance with multiple form types; said meter further being configured to assign a case number to each form type.

35. (once amended) An electric meter in accordance with Claim [32] 31 further configured to check voltages at programmed intervals and to change metering form a second time in accordance with the checked voltage.

36. (once amended) An electric meter in accordance with Claim [32] 31 configured as in a wye configuration initially and wherein said meter being configured to

change metering form type in accordance with a remaining set of phase voltages comprises said meter being configured to change the form to a 2 1/2 element meter.

37. (once amended) An electric meter in accordance with Claim [32] 31 wherein said meter being configured to monitor voltage changes on at least one of the phase voltages comprises said meter being configured to periodically check whether voltage is lost.

39. (once amended) An electric meter in accordance with Claim [32] 31 wherein said meter being configured to monitor voltage changes on at least one of the phase voltages comprises said meter being configured to determine that a voltage is lost when the voltage drops to one-half of a normal voltage.

45. (once amended) An electric meter in accordance with Claim 44 wherein said meter is configured to respond to voltage changes including at least one of a voltage sag below a predetermined level and a voltage swell above a predetermined level.

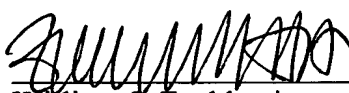
57. (once amended) An electric meter for metering energy consumption, said meter comprising a microcomputer configured to:

operate the meter in a first mode of operation;

periodically check, at temporal period boundaries, for pending changes to the mode of operation; and

effect the change to the mode of operation after a periodic check.

Respectfully submitted,



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